



TABLE OF CONTENTS

<u>Local Federal Aid Program</u>	<u>Sections</u>
<i>General and Administrative</i>	<i>I</i>
Overview	I-1
Highway Bridge Replacement and Rehabilitation Program (HBRRP)	I-1
Surface Transportation Program (STP) - Urban	I-1
Surface Transportation Program (STP) - Enhancement	I-1
Congestion Mitigation and Air Quality (CMAQ)	I-1
Access to Corps of Engineers Lakes Program	I-2
General	I-2
Reasonable Progress Policy	I-3
Inventory	I-5
Bridge Inventory and Inspection	I-5
Roadway Inventory	I-5
Utilities	I-5
Administration of Funding:	
HBRRP	I-5
STP-URBAN	I-7
STP-ENHANCEMENT	I-8
CMAQ	I-10
Access to Corps of Engineers Lakes Program	I-10
Summary of Typical Federal Aid Procedures	
Preliminary	I-10
Preliminary and Final Design	I-11
Contract Letting and Construction	I-12
Local Match Guidelines	I-13
Flow Chart	Fig. I-1
<i>Bridge Soft Match Credit Program</i>	<i>II</i>
Overview	II-1
General	II-1
Project Selection	II-2
Eligible Costs for Soft Match Credit	II-2
Final Design	II-2
PS&E Submittal	II-3
Construction Letting	II-4
Construction	II-4
Request for Credit Submittal	II-5
Use of Soft Match Credit	II-6
<i>Project Selection and Programming</i>	<i>III</i>
Prohibiting the Use of Data as Evidence	III-1
HBRRP - Project Selection	III-1
HBRRP - Programming	III-2
STP-URBAN - Project Selection	III-3
STP-URBAN - Programming	III-5
STP-ENHANCEMENT - Project Selection and Programming	III-6
CMAQ - Project Selection	III-7



TABLE OF CONTENTS

Local Federal Aid Program	Sections
<i>Project Selection and Programming (continued)</i>	<i>III</i>
CMAQ - Programming - Roadway Type Projects	III-6
CMAQ - Programming - Non-Roadway Type Projects	III-7
Access to Corps of Engineers Lakes	
Project Selection and Programming	III-8
Programming Data Form	Fig. III-1
Utility Scoping Checklist	Fig. III-2
<i>Environmental and Cultural Requirements</i>	<i>IV</i>
General	IV-1
National Environmental Policy Act (NEPA)	IV-1
Environmental Assessment	IV-1
Finding of No Significant Impact (FONSI)	IV-3
Environmental Impact Statement - Draft	IV-3
Final Environmental Impact Statement	IV-4
Reevaluations	IV-6
Supplemental Environmental Impact Statement	IV-6
Contents of Draft and Final Environmental Impact Statements	IV-7
Social/Economic/Environmental Justice	IV-7
Farmland Protection Policy Act	IV-8
404 Permits	IV-9
Air Quality Requirements	IV-10
Noise Standards and Noise Abatement	IV-10
Section 4(f)	IV-12
Section 4(f) Evaluations	IV-12
Content of a Section 4(f) Evaluation	IV-15
Historic and Archaeological Sites And Historic Bridges - Section 106	IV-17
Endangered Species Act	IV-18
Hazardous Waste	IV-18
Categorical Exclusion Determination	Fig. IV-1
Instruction for Preparing Categorical Exclusion Determination	Fig. IV-1-A
Farmland Conversion Impact Rating	Fig. IV-2
Section 106 Project Information Form	Fig. IV-3
Section 106 Flowchart of Typical Procedures	Fig. IV-4
Memorandum of Agreement	Fig. IV-5
Application for Department of the Army Permit	Fig. IV-6
Nationwide 404 Permit for Minor Road Crossings	Fig. IV-7
Air Quality Analysis	Fig. IV-8
Emmission Factors	Fig. IV-9
Composite Emmission Factor vs. Total Concentration -Wind Angle 20	Fig. IV-10
Composite Emmission Factor vs. Total Concentration -Wind Angle 10	Fig. IV-11
Air Quality Sample Statement	Fig. IV-12
Local Public Agency Section 4(f) Compliance Worksheet	Fig. IV-13
<i>Agreements</i>	<i>V</i>
Off-system Bridge Replacement and Rehabilitation Program Agreement	Fig. V-1
On-system Bridge Replacement and Rehabilitation Program Agreement	Fig. V-2
STP-Urban Program Agreement	Fig. V-3



TABLE OF CONTENTS

<u>Local Federal Aid Program</u>	<u>Sections</u>
<i>Agreements (continued)</i>	<i>V</i>
Transportation Enhancement Funds Program Agreement	Fig. V-4
Congestion Mitigation and Air Quality Agreement	Fig. V-5
CMAQ (Equipment and Vehicle Purchases)	Fig. V-6
Access to Corps of Engineers Lakes Program Agreement	Fig. V-7
Enabling Legislation	Fig. V-8
<i>Consultant Contracts</i>	<i>VI</i>
General	VI-1
Selection Procedures	VI-2
Scope of Services	VI-2
Basis of Payment	VI-3
Evaluations	VI-3
Contract Submittal	VI-3
Supplemental Agreements	VI-5
Consultant Performance Appraisal	VI-6
Contract	Fig. VI-1
Consultant Selection Criteria	Fig. VI-2
Missouri Revised Statutes - Consultant Selection	Fig. VI-3
Supplemental Agreement to Engineering Services Contract	Fig. VI-4
Consultant Performance Appraisal Form	Fig. VI-5
Common Unallowable Costs	Fig. VI-6
<i>Right of Way and Public Hearings</i>	<i>VII</i>
Right of Way	VII-1
Public Hearings	VII-1
Location Public Hearings	VII-2
Design Public Hearings	VII-2
Additional Hearings or Meetings	VII-3
Advertisement for Public Hearings	VII-3
Advertisement for Opportunity for Public Hearings	VII-4
Procedures for Conducting Public Hearings	VII-5
Formal Public Hearings	VII-5
Formal Location Public Hearings	VII-6
Formal Design Public Hearings	VII-7
Open-House Public Hearings	VII-7
Transcripts	VII-8
Example Notice of Public Hearing	Fig. VII-1
<i>Preliminary Design</i>	<i>VIII</i>
Design Criteria	VIII-1
Design Variances	VIII-2
Accuracy	VIII-2
Preliminary Plans	VIII-2



TABLE OF CONTENTS

<u>Local Federal Aid Program</u>	<u>Sections</u>
<i>Preliminary Design (continued)</i>	<i>VIII</i>
Traffic Signal Plans and Signal Warrants	VIII-3
Railroad Crossings	VIII-3
Utility Relocation	VIII-3
Bridge Preservation:	
3 R Projects	VIII-5
Seismic Retrofit	VIII-5
Bridge Steel Painting	VIII-5
Bridge Rehabilitation:	
Design Criteria	VIII-5
Funding	VIII-6
Removal of Deficiencies	VIII-6
Condition Rating Which May be Left in Place	VIII-6
Truck Load Capacity	VIII-7
Bridge Width	VIII-7
Bridge Rail System	VIII-7
Seismic Requirements	VIII-7
Investigations	VIII-7
Preliminary Bridge Submittal	VIII-8
Bridge Replacement:	
Design Criteria	VIII-8
Preliminary Plans	VIII-8
Structure Type	VIII-8
Low Water Stream Crossing	VIII-9
Truck Loadings	VIII-9
Seismic Requirements	VIII-9
Bridge Width	VIII-9
Investigations	VIII-11
Hydraulic Field Investigations	VIII-11
Design Discharges	VIII-11
Hydraulic Analysis	VIII-12
Valley Slope	VIII-13
Streambed Slope	VIII-13
Backwater Limitations	VIII-14
Hydraulic Capacity	VIII-15
Design High Water Elevation	VIII-17
Freeboard Capacity	VIII-18
Federal Emergency Management Agency, (FEMA)	VIII-20
Hydraulic Summary Data Table	VIII-21
Scour Evaluation	VIII-21
Channel Modification	VIII-22
Hydraulic Design Variances	VIII-23
Geotechnical Investigation	VIII-24



TABLE OF CONTENTS

<u>Local Federal Aid Program</u>	<u>Sections</u>
<i>Preliminary Design (continued)</i>	<i>VIII</i>
Barrier Railing Systems	VIII-24
On-Federal-System Routes	VIII-26
Off-Federal-System Routes	VIII-27
Sidewalks	VIII-28
Preliminary Bridge Submittal	VIII-28
Roadway Drainage Structures Drainage Areas \leq 1000 acre (400 ha)	
Structure Type	VIII-30
Hydrologic Analysis	VIII-30
Hydraulic Design	VIII-30
Preliminary Submittal	VIII-31
Roadway Crossings	VIII-31
Railroad Crossings	VIII-31
Retaining Walls	VIII-31
Pedestrian Bridges	
Design Criteria	VIII-31
Structure Type	VIII-31
Design Loadings	VIII-32
Vehicular Load	VIII-32
Geometric	VIII-32
Hydraulic Investigation	VIII-33
Geotechnical Investigation	VIII-33
Preliminary Submittals	VIII-33
Low Water Stream Crossing Design Criteria	
Suitability	VIII-33
Hydraulic Variance	VIII-34
Hydraulic Design	VIII-35
Scour Evaluation	VIII-35
Structural and Roadway Design	VIII-35
Traffic Signing	VIII-36
Provisions for Vehicle Turn Around	VIII-36
Preliminary Submittal	VIII-36
Design Criteria	Fig. VIII-1
Design Variance Information	Fig. VIII-2
Dimensional Accuracy	Fig. VIII-3
Minimum Hydraulic Design Requirements	Fig. VIII-4
Engineering "No Rise" Certificate	Fig. VIII-5
Hydraulic Summary Data Tables	Fig. VIII-6
Preliminary Design Checklist	Fig. VIII-7
FEMA Investigation Certification	Fig. VIII-8
<i>Final Design</i>	<i>IX</i>
General	IX-1
Roadway	IX-1
Stormwater and Erosion Control	IX-1



TABLE OF CONTENTS

<u>Local Federal Aid Program</u>	<u>Sections</u>
<i>Final Design (continued)</i>	<i>IX</i>
Traffic Control	IX-2
Railroad Crossings	IX-2
Utilities	IX-3
Bridge Design Criteria	IX-3
Design Specifications	IX-3
Seismic Investigation	IX-3
Structural Inventory and Appraisal Sheet	IX-4
Bridge Railing Systems	IX-4
Bridge Drawings	IX-5
Estimates	IX-5
Work by Local Forces	IX-6
Specifications and Job Special Provisions	IX-7
Acceptance of Double Tee, I-Girder, Box-Girder and Slab Panels	IX-7
Acceptance of Structural Steel	IX-8
Acceptance of Prefabricated Structures	IX-8
Inspection By MoDOT and FHWA	IX-10
Plans, Specifications and Estimate Submittal	IX-10
State Outline Map (Acceleration Coefficient)	Fig. IX-1
Work by Local Forces Proposal	Fig. IX-2
Final Design Checklist	Fig. IX-3
Utility Depth and Encasement Requirements	Fig. IX-4
<i>Construction Authorization and Letting</i>	<i>X</i>
Bid Proposals	X-1
Schedule of Deductions (Overrun in Contract Time)	X-3
Contractor Letting and Award	X-4
Bidder Qualification Language	X-5
Checklist for Bid Proposal	Fig. X-1
Required Clearances for Borrow Areas	Fig. X-2
Sample Advertisement	Fig. X-3
Anti-Collusion Statement	Fig. X-4
Subcontractor Certification Regarding Affirmative Action	Fig. X-5
<i>Construction</i>	<i>XI</i>
Preconstruction Conference	XI-1
Consultant Construction Engineering Services	XI-1
Bridge Deck Finishing	XI-1
Change Orders	XI-2
Value Engineering	XI-3
Initial Data from Local Agency	XI-4
General Documentation Requirements	XI-4
Progress Reports	XI-6
Materials Testing	XI-6
Invoices	XI-7



TABLE OF CONTENTS

<u>Local Federal Aid Program</u>	<u>Sections</u>
<i>Construction (continued)</i>	<i>XI</i>
Subcontracts and Approval	XI-7
Labor Records	XI-7
Information Posters	XI-9
Labor Interviews	XI-9
Equal Employment Opportunity Requirements	XI-10
Final Acceptance	XI-10
Final Certifications	XI-11
Work by Local Forces	XI-12
Final Plans	XI-13
Acceptance of Small Quantities	XI-13
General Guidelines for Preconstruction Conference	Fig. XI-1
Change Order Form	Fig. XI-2
Progress Report	Fig. XI-3
Request for Approval of Subcontract	Fig. XI-4
Wage Rate Interview	Fig. XI-5
Form FHWA-1391	Fig. XI-6
Contractor Certification	Fig. XI-7
Contractor's Affidavit Regarding Settlement of Claims	Fig. XI-8
Affidavit (Compliance with the Prevailing Wage Law)	Fig. XI-9
Guide Schedule for Federal-Aid acceptance Sampling	Fig. XI-10
<i>Reimbursement and Auditing</i>	<i>XII</i>
Reimbursement and Auditing	XII-1
Progress Invoices	XII-2
Final Invoices	XII-3
Audit and Final Reimbursement	XII-3
Sample form for Submitting Invoices	Fig. XII-1
<i>Glossary of Terms</i>	<i>XIII</i>
<i>Addresses of MoDOT offices, MPOs and other Regulatory Agencies</i>	<i>XIV</i>